MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Permitting and Compliance Division
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PPL Montana, LLC
Colstrip Steam Electric Station
Section 34, Township 2 North, Range 41 East, Rosebud County, Montana
580 Willow Ave., P.O. Box 38
Colstrip, MT 59323

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	**Yes**	**No**	**Comments**
Source Tests Required	X		Method 5, Method 6, Method 7, Method 9
Ambient Monitoring Required		X	
COMS Required	X		#OP0513-09, Appendix E
CEMS Required	X		#OP0513-09 - CO_2, Appendix F - SO_2 and Appendix G - NO_x
Mercury Emissions Monitoring System (MEMS) Required	X		
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		As Applicable
Monthly Reporting Required		X	
Quarterly Reporting Required	X		Opacity, NO_x, SO_2, and mercury
Applicable Air Quality Programs			
ARM Subchapter 7 Montana Air Quality Permits (MAQP)	X		MAQP #0513-08
New Source Performance Standards (NSPS)	X		40 CFR Part 60, Subpart D, Da, and Y
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		No, Except for 40 CFR Part 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR Part 63, Subparts DDDDD, UUUUU, and ZZZZ
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR	X		
Risk Management Plan Required (RMP)	X		
Acid Rain Title IV	X		#OP0513-09, Appendix H
Compliance Assurance Monitoring (CAM)	X		#OP0513-09, Appendix I
Montana Regional Haze Federal Implementation Plan (FIP)	X		40 CFR 52.1396
State Implementation Plan (SIP)	X		General SIP applies

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the permit by the United States Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit.

Conclusions in this document are based on information provided in the Title V Operating Permit renewal application submitted to the Department of Environmental Quality (Department) by PPL Montana, LLC (PPLM) on March 25, 2010, with additional information submitted on March 30, 2012, related to the plan for Compliance Assurance Monitoring (CAM). In addition, information was gathered from the PPLM submittal of the Title V Operating Permit renewal application received by the Department on June 27, 2002. Additional information for the renewal application was received on October 10, 2003. A significant modification application was received on December 31, 2008. Conclusions in this document are also based on information gathered from the original permit issued April 1973 and August 1981, and the PSD permit issued by the EPA in 1979. Further, information was gathered from the application submitted by the Montana Power Company (MPC) – Colstrip on June 12, 1996, and additional information submitted December 20, 1995, February 9, 1996, September 18, 1996, October 7, 1996, December 16, 1996, and September 16, 1997. Additional submittals were provided on May 14, 1998; August 13, 1998, August 16, 1999; June 26, 2000; May 1, 2001, and October 23, 2007. Additional information was provided in the application for a Montana Air Quality Permit (MAQP) submitted to the Department on January 11, 2005. An application for renewal (#OP0513-07) was received on March 25, 2010. Following issuance of draft Operating Permit #OP0513-07, the Department reissued the permit under Operating Permit #OP0513-08.

B. Facility Location

PPLM operates the Colstrip Steam Electric Station consisting of four tangential coal fired boilers and associated equipment for generation of electricity. The Colstrip facility is located in Section 2, Township 2 North, Range 41 East, Rosebud County, Montana.

C. Facility Background Information

Montana Air Quality Permit (MAQP)

On April 23, 1973, **MAQP #513-111472 (#0513-00)** was issued to the MPC for the construction of Units 1 & 2, and on August 26, 1981, MAQP #0513-00 was issued to MPC for the operation of Units 1 & 2.

A petition for modification of the permit was filed by MPC on January 25, 1978. On February 28, 1978, the Board of Health and Environmental Sciences issued a board order to modify the Preconstruction Permit. The modification included changing the height of the two stacks to 525 feet and allowing the inlet sulfur dioxide (SO_2) monitor values to be based on a 3-hour average.

MAQP #0513-01 was issued to MPC to include the installation and operation of a Syncoal Truck Dump and a lime silo bin vent. Syncoal fines and coarse product are combined to form a blend product that will be supplied to Units 1 & 2. The installation and operation of these sources will increase the allowable particulate emissions for Units 1 & 2 by 1.12 tons per year (TPY). MAQP #0513-01 replaced MAQP #0513-00 (513-111472).

MAQP #1187 was issued to MPC on January 20, 1977, for the construction of Units 3 & 4. Because the proposed facility was a major source under the Prevention of Significant Deterioration (PSD) program, the additional review requirements of the PSD program applied to the project. The state did not have authorization to implement the PSD program at the time of the application; therefore, the PSD review was conducted by the EPA. EPA issued a PSD permit for the construction of the facility on September 11, 1979.

MAQP #1187-M1 was issued on February 5, 1980, and **MAQP #1187-M2** was issued on May 26, 1981. The modifications were completed because of changes to the applicable rules and standards of the Administrative Rules of Montana (ARM) and to include changes that had been made at the facility differing from the original application.

On October 13, 1996, **MAQP #1187-03** was issued. The permit correctly identified the actual maximum heat input capacity of Units 3 & 4. The units are each rated at a heat-input capacity of 7573 million British thermal units per hour (MMBtu/hr) with a production capacity of 778 Megawatts. These are nominal capacities for the facility and, depending on plant operating conditions, actual heat input to the facility may be as high as 8000 MMBtu/hr from each unit.

MAQP #1187-M2 and the EPA permit contained emission limits for particulate, SO_2, and oxides of nitrogen (NO_x) with units of pounds per MMBtu (lb/MMBtu). To ensure that emissions from the facility were not higher than those on that the original analysis was based, this permit established emission limits for these pollutants in the units of pounds per hour (lb/hr). The new emission limits were established based on the nominal heat input to the boilers of 7573 MMBtu/hr multiplied by the current emission limits in lb/MMBtu. MAQP #1187-03 also placed a yearly fuel consumption limit on each unit. The limit was equal to the heat input of each unit operating at the nominal heat input rate of 7573 MMBtu/hr for 8760 hours per year. This limit ensured that emissions of pollutants that did not have limits in the permit were not increased above current levels. The permit also incorporated requirements from the PSD permit issued by EPA in 1979. These requirements were incorporated at the request of MPC for the purpose of developing a comprehensive document that contained pertinent requirements from both the state permit and the EPA PSD permit. MAQP #1187-03 replaced MAQP #1187-M2.

On September 30, 1998, **MAQP #1187-04** was issued to MPC for Units 3 & 4. The alteration included incorporation of a 3-hour rolling average SO_2 limit, the 1% inlet sulfur standard that was inadvertently removed during the previous modification, and the removal of the inlet monitor requirement.

The 3-hour SO_2 limit was incorporated in the permit to ensure protection of the 3-hour SO_2 standard. During the last permit action, the maximum heat inputs for Units 3 & 4 were discovered to be 8,000 MMBtu/hr. Because these heat inputs were higher than those in the original permit, the Department and MPC agreed that short-term SO_2 and NO_x emission limits would be implemented. The Department completed modeling for the short-term SO_2 emission limits. MPC was limited to a maximum of 4273 lb/hr of SO_2, averaged over any rolling 3-hour period from both stacks combined. These limits allowed MPC the flexibility of operating Unit 3 or Unit 4 at a higher level at any one time, while continuing to ensure protection of the standard.

The 1% inlet sulfur limit existed in the original permit, but was inadvertently removed during a previous permit action. MPC continued to maintain compliance with the 1% inlet sulfur limit, even though it was not stated in the permit.

The requirement for the inlet sulfur monitor as a compliance demonstration for the inlet sulfur content was replaced with an on-going fuel-sampling analysis. The on-going fuel-sampling analysis yielded a more accurate account of the sulfur content of the fuel, as compared to the sulfur content being correlated to SO_2 emissions.

The permitting action was an alteration of MAQP #1187-03 because of the change in the compliance demonstration for the 1% sulfur content limit. The 1% sulfur content limit and demonstration of compliance was included in the February 28, 1978, Board of Health and Environmental Sciences Findings of Fact and Conclusions of Law and Order. The alteration process allowed public involvement in the change in the compliance demonstration method. However, the permitting action did not result in any change in the emissions from the facility. MAQP #1187-04 replaced MAQP #1187-03.

In letters dated June 18, 1999, and August 16, 1999, MPC and PPLM requested that the permits for Units 1 & 2 and Units 3 & 4 be transferred to reflect the new ownership. The transfer of the permits was to occur when the transfer of ownership to PPL Montana, LLC was final. Through the Department's review, it was determined that Units 1 & 2 and 3 & 4 would now be defined as one source. Therefore, the permit modification transferred ownership, as well as combined MAQPs #0513-01 and #1187-04. The permit conditions remained the same, but were simply combined into one permit. **MAQP #0513-02** replaced MAQPs #0513-01 and #1187-04.

On September 10, 2000, **MAQP #0513-03** was issued to PPLM to conduct a test burn of petroleum coke/Syncoal/Rosebud coal fuel combination in Units 1 & 2. A petroleum coke consumption limit was placed in the permit to ensure that the proposed test burn did not exceed 15 TPY of any pollutant. Because the emissions from this project were less than 15 TPY of any pollutant, the project occurred in accordance with the ARM 17.8.745(1). MAQP #0513-03 replaced MAQP #0513-02.

On May 1, 2001, PPLM submitted a completed application to the Department proposing to add petroleum coke to the list of fuels to be used in Units 1 & 2, which were then permitted to burn Syncoal and subbituminous coal. The alteration to MAQP #0513-03 limited the amount of petroleum coke that could be burned in Units 1 & 2. The conditions included in the permit for the burning of petroleum coke were Section II.A.9, 10, 11, 12, and 13, Section II.B.3 and Section II.F. The permitting action was not considered a major modification under the PSD regulations because the facility was capable of accommodating petroleum coke. **MAQP #0513-04** replaced MAQP #0513-03.

On January 11, 2005, Arnold & Porter LLP, on behalf of PPLM, submitted a request for an administrative amendment to MAQP #0513-04. The request was to reduce the 3-hour rolling average SO_2 emissions limit (combined stack limit) for Units 3 & 4 from 4,273 lb/hr to 4,140 lb/hr.

The request was submitted in response to an outstanding concern of the Department and the Northern Cheyenne Tribe regarding emissions modeling for SO_2 increment consumption conducted for the issuance of the 1979 PSD permit for Units 3 & 4.

As part of the permit application, PPLM submitted AERMOD modeling to demonstrate compliance with the Class I PSD increment for SO_2 on the Northern Cheyenne Reservation. The Department, in consultation with the EPA Region VIII and the Northern Cheyenne Tribe, requested an additional sensitivity analysis be conducted at a 75% load scenario to comply with national modeling guidance and the model's demonstrated sensitivity to plume rise. PPLM submitted the sensitivity analysis demonstrating that the proposed SO_2 limit of 4,140 lb/hr would protect the 3-hour increment on the Northern Cheyenne Reservation.

In addition, PPLM submitted a request to the Department on November 20, 2000, to remove the ambient air quality monitoring requirements from MAQP #0513-04 for Units 3 & 4. Based on the request and additional information submitted on October 3, 2001, the Department approved the removal of the monitoring requirements. The Department sent an approval letter dated October 19, 2001, after PPLM demonstrated that the potential to cause a violation of the ambient standard was minimal at all sites and monitoring may be removed as provided for in the October 1998 Department guidance.

The permit format, language, and rule references were updated to reflect then-current Department permit format, language and rule references. **MAQP #0513-05** replaced MAQP #0513-04.

On October 23, 2007, PPLM submitted a request for an administrative amendment to MAQP #0513-05. The request was to incorporate revised NO_x standards for Units 3 & 4, as stipulated by Consent Decree CV-07-40-BLG-RFG-CSO entered on May 14, 2007. In addition, the Department was requested to clarify that the compliance demonstration for the revised limits would be demonstrated for an "operating day" firing any fuel, which would go beyond the Consent Decree requirements. **MAQP #0513-06** replaced MAQP #0513-05.

On December 31, 2008, PPLM submitted an application to modify MAQP #0513-06. The reason for the modification was to establish a mercury emission limit for Units 1-4, pursuant to ARM 17.8.771, and to provide an analysis of potential mercury control options including, but not limited to, boiler technology, mercury emission control technology, and any other mercury control practices. The application included a proposed mercury emission control strategy, a proposed mercury emission limit, and associated operating requirements for Units 1-4 in order to comply with ARM 17.8.771. The permit action updated rule references, permit format, and the emissions inventory. **MAQP #0513-07** replaced MAQP #0513-06.

On January 28, 2010, PPLM requested an administrative amendment to MAQP #0513-07. The reason for the amendment was to update a compliance date for NO_x emissions from Colstrip Unit 4 pursuant to its Consent Decree. A stipulation to the Consent Decree was filed on December 22, 2009 due to the occurrence of a Force Majeure incident, such that a new compliance date for installation and operation of the digital controls, low-NO_x burners and overfire air was established to be March 31, 2010 or seven days after the completion of NO_x emission controls tuning, whichever date was earlier. Tuning was completed on Unit 4 NO_x control systems on January 12, 2010. This amendment updated the permit to reflect the changes to the Consent Decree; specifically, the applicable compliance dates in Sections II.A.18 and 20 were updated to January 19, 2010. **MAQP #0513-08** replaced MAQP #0513-07.

Title V Operating Permits

On September 23, 1997, draft **Operating Permit #OP0513-00** was issued to MPC for Units 1 & 2. The permit contained the necessary requirements to comply with the operating permit program requirements and the acid rain permitting requirements.

On October 6, 1997 (prior to the permit becoming final and effective), **Operating Permit #OP0513-01** was issued to MPC to correct errors in Operating Permit #OP0513-00. The permit contained a typographical error in the expiration date. The Montana air quality regulation and the acid rain regulations both require the issuance of permit with a fixed term of 5 years. The permit effective date was January 1, 1998. The expiration date should have been December 31, 2002, instead of 2003. Operating Permit #OP0513-01 replaced Operating Permit #OP0513-00.

On April 12, 2005, the Department issued **Operating Permit #OP0513-02** final and effective. The permit was a renewal of Title V Operating Permit #OP0513-01 and Operating Permit #OP1187-00. The two permits, along with the Acid Rain Permit #AR1187-00, were combined as Operating Permit #OP0513-02. Changes in the permit included the addition of two small propane fueled emergency backup generators at the facility, and the removal of the auxiliary boiler for Units 3 & 4. Also, PPLM submitted a CAM Plan for particulate matter (PM) for Units 1-4 in accordance with 40 CFR Part 64. A summary of the CAM plan can be found in Appendix I of the Title V Operating Permit. A complete copy of the CAM plan can be obtained from the Department or the facility.

The Department included a compliance plan/schedule in Section III.A. The Department believed that PPLM had not been able to demonstrate compliance with protection of the 3-hour and 24-hour SO_2 increments (ARM 17.8.804 and ARM 17.8.820) on the Northern Cheyenne Reservation. The condition required PPLM to submit a narrative description of how the facility would demonstrate compliance with these increments and provide a schedule for achieving such compliance. Further information can be found in Section I.F. Compliance Demonstration. The permit was also updated to reflect current permit rule citations and format. Operating Permit #OP0513-02 replaced Operating Permits #OP0513-01, #OP1187-00, and #AR1187-00.

An administrative amendment to incorporate the changes made to Operating Permit #0513-05 was completed. The amendment included the reduction of the 3-hour rolling average SO_2 emissions limit (combined stack limit) for Units 3 & 4 from 4,273 lb/hr to 4,140 lb/hr. **Operating Permit #OP0513-03** replaced Operating Permit #OP0513-02.

On October 23, 2007, PPLM submitted a request to incorporate revised NO_x standards for Units 3 & 4 into PPLM's MAQP and Title V permits. The application was deemed complete on December 20, 2007. The request was to incorporate revised NO_x standards for Units 3 & 4, as stipulated by Consent Decree CV-07-40-BLG-RFG-CSO entered on May 14, 2007. In addition, the Department clarified that the compliance demonstration for the revised limits would be demonstrated for an "operating day" firing any fuel, which would go beyond the Consent Decree requirements**. Operating Permit #OP0513-04** replaced Operating Permit #OP0513-03.

As part of this significant modification, the Department made the following additional administrative corrections:

- Renumbered the emitting units (EU) in the table under Section II to reflect the current identifications;
- Added EU016, for the alternate fuel loading requirements;
- Removed EU012, for the scrubber relining process, since it was determined that this was a maintenance procedure involving air pollution control for EU001 – EU004 and was in fact an insignificant activity;
- Revised opacity requirements for Units 1 - 4 to include opacity of 20% or greater averaged over 6 consecutive minutes "*except for one 6-minute period per hour of not greater than 27% opacity"* consistent with the NSPS;
- Revised NO_x limitations under Section III.B.7 and III.C.10, to reflect conformance with Acid Rain provisions;
- Added Units 1 & 2 Syncoal and petroleum coke and scrubber operation requirements;
- Changed SO_2 reference test methods from Methods 6 & 6A to Methods 6 & 6C;
- Clarified continuous emission monitoring systems (CEMS) reporting (opacity, SO_2 and NO_x) to be quarterly for Unit 1 – 4. While the Department has historically requested quarterly reporting, the Title V permit was previously inconsistent. This included updates to EU001 – EU004 as well as Appendices E, F, and G;

- Clarified that compliance with the requirements in the consent decree entered 5/14/07 (Consent Decree CV-07-40-BLG-RFC-CSO0) is deemed compliance with the Units 3 & 4 requirements for Best Available Retrofit Technology (BART); and

- Renumbered CEMS regulatory requirements to reflect the revised NSPS – 40 CFR Part 60, Subpart Da.

On December 31, 2008, PPLM submitted an application to modify Operating Permit #OP0513-04 to include mercury emission limitations under ARM 17.8.771 that were incorporated into MAQP #0513-07 on April 9, 2009. On February 3, 2009, PPLM sent a letter to the Department requesting that Steve Christian be designated as an Alternate Responsible Official. Operating Permit #OP0513-04 was updated to reflect the new mercury control requirements and the new Alternate Responsible Official. **Operating Permit #OP0513-05** replaced Operating Permit #OP0513-04.

On January 28, 2009, PPLM requested an administrative amendment to Operating Permit #OP0513-05. The amendment was to update a compliance date for oxides of nitrogen (NO_x) emissions from Colstrip Unit 4 pursuant to Consent Decree CV-07-40-BLG-RFC-CSO (Consent Decree) entered May 14, 2007. A stipulation to the Consent Decree was filed on December 22, 2009 due to the occurrence of a Force Majeure incident, such that a new compliance date for installation and operation of the digital controls, low-NO_x burners and overfire air was established to be March 31, 2010 or seven days after the completion of NO_x emission controls tuning, whichever date is earlier. Tuning was complete on Unit 4 NO_x control systems on January 12, 2010. This amendment updated the permit to reflect the changes to the Consent Decree, specifically compliance dates for Unit 4 NO_x emissions at Sections III.C.14 and 16 were changed to January 19, 2010. **Operating Permit #OP0513-06** replaced Operating Permit #OP0513-05.

On March 25, 2010, the Department received an application for renewal of PPLM's Title V Operating Permit. The permit action was a renewal of Operating Permit #OP0513-06 for PPLM and included updates of current permit language and rule references used by the Department. During the renewal process, it became apparent that language and requirements included within a Findings of Fact and Conclusions of Law signed by the Board of Health and Environmental Sciences (BHES) on November 21, 1975 had not been included within the permit. The document contains information and requirements pertaining to the grant of conditional certification for Colstrip Units 3 and 4 made pursuant to Section 70-810 (L), Revised Code of Montana (R.C.M) 1947 of the Major Facility Siting Act (MFSA). The document states that "The applicant's will utilize only coal from the Rosebud seam. It will at no time exceed 1% inlet sulfur content. Daily testing of the coal and sulfur content will be required to effect that control." Operating Permit #OP0513-06 did not include a requirement specifying the coal source (i.e. Rosebud seam). Draft Operating Permit #OP0513-07 (and subsequent iterations) incorporated this condition as required under the requirements of Title V of the Federal Clean Air Act (FCAA).

The Department issued draft Operating Permit #OP0513-07 on May 17, 2011. Following the issuance of draft Operating Permit #OP0513-07, through the review of the administrative process of issuance, the Department determined that it had not met its obligation under ARM 17.8.1233, specifically giving notice to all "Affected States" (or entities, as is applicable in this case) as defined under ARM 17.8.1201(3). The Department did not notify the Northern Cheyenne or Crow Tribes during the issuance of draft Operating Permit #OP0513-07.

Further, following issuance of draft Operating Permit #OP0513-07, the Department received a substantial number of public comments as well as comments and additional information (i.e., an updated CAM plan) from PPLM. To address administrative notifications and substantive changes to the CAM plan, the Department made a determination that it was appropriate to re-issue the draft operating permit. This draft permit was assigned #OP0513-08. The Draft Title V Operating Permit

#OP0513-08 was issued on August 10, 2012. The 30 day public comment period was set to end on September 10, 2012. On August 17, 2012, the Department received a request to extend the public comment period on Draft Operating Permit #OP0513-08. The Department granted the request and approved a 14-day extension to the original 30-day public comment period on Draft Operating Permit #OP0513-08. In order to be considered, the comments on Draft Operating Permit #OP0513-08 were to be received by September 24, 2012. The Department prepared responses to the comments received on Draft Title V Operating Permit #OP0513-08 and included within this document at the time of issuance.

Operating Permit #OP0513-08 replaced Operating Permit #OP0513-06.

D. Current Permit Action

The Department opened up Operating Permit #OP0513-08 for the purpose of including permit conditions associated with the following:

- 40 CFR 63, Subpart UUUUU - *National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Coal and Oil-Fired Electric Generating Units*
- Montana's Regional Haze Federal Implementation Plan (FIP)

40 CFR 63, Subpart UUUUU

On February 16, 2012, EPA finalized the Mercury Air Toxics Standard (MATS) rule, also known as the Utility Maximum Available Control Technology (MACT) Standard for the utility sector. 40 CFR 63, Subpart UUUUU - *NESHAPs for Coal and Oil-Fired Electric Generating Units* was published final in the Federal Register (77 FR 9464) with an effective date of April 16, 2012.

Montana's Regional Haze FIP

One of the principal elements of the visibility protection provisions of the FCAA is the provision in 42 U.S.C. Sec. 7491 addressing the installation of Best Available Retrofit Technology (BART) for certain existing sources. The FCAA defines the sources potentially subject to BART as major stationary sources, including reconstructed sources, from one of 26 identified source categories which have the potential to emit 250 tons per year or more of any air pollutant, and which were placed into operation between August 1962 and August 1977. Units 1 and 2 within the PPLM Colstrip facility were included under the list of sources potentially subject to BART.

On September 18, 2012, EPA adopted, as a final regulation, revisions to 40 CFR Part 52, Approval and Promulgation of Implementation Plans; State of Montana; State Implementation Plan and Regional Haze FIP. See 77 FR 57863-57919. The final rule became effective October 18, 2012. The EPA promulgated the FIP to address regional haze in the State of Montana and this final rule making will affect the PPLM Colstrip facility. The regulation requires that compliance with BART PM limitations, specifically for Units 1 and 2, must be achieved by November 17, 2012. Compliance with specific SO_2 and NO_x limitations set forth within the FIP must be achieved within 180 days after the effective date of the FIP where installation of additional controls is not necessary to comply with the BART limit; otherwise the compliance deadline is five years after the effective date of the FIP. For Units 1 and 2, additional controls will be necessary to comply with the SO_2 and NOx limitations; therefore, the compliance date is October 18, 2017 for those pollutants.

Construction of Units 3 and 4 fell outside the applicability timeframe identified within the CAA; therefore, a BART analysis was unnecessary for these particular units at this time. In addition, EPA did not require emission limits or controls pursuant to the Reasonable Progress portion of the Regional Haze FIP for Units 3 and 4.

The current permit action incorporates requirements associated with 40 CFR Part 63, Subpart UUUUU as well as BART limitations for PM, SO_2, and NO_x established as a result of promulgation of Montana's Regional Haze FIP.

Operating Permit #OP0513-09 replaces Operating Permit #OP0513-08.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or *damaging* of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by Sections 2-10-101 through 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

The PPLM - Colstrip facility was last inspected on December 20, 2011, with a Full Compliance Evaluation finalized on January 17, 2012. The report indicated that the facility was found to be in compliance with all applicable requirements.

On October 19, 2012, the Department issued Violation Letter #VLRG12015 to PPLM citing operation without a valid Title V operating permit as well as excess opacity emissions. With regard to operation without a valid Title V operating permit, the letter stated the following: "Under ARM 17.8.1220(12), expiration of an air quality operating permit terminates the source's right to operate unless a timely and administratively complete permit renewal application has been submitted consistent with ARM 17.8.1205(2) and 17.8.1221. According to ARM 17.8.1205(2)(c), for renewal, a permittee shall submit a complete air quality operating permit application to DEQ not later than six months prior to the expiration of the existing permit, unless otherwise specified in that permit. Operating Permit #OP0513-06 for the Colstrip Power Plant expired on April 12, 2010. On March 25, 2010, DEQ received a complete Title V Operating permit renewal application from PPL for the Colstrip Power Plant. For the application to be considered timely PPL should have submitted a renewal application for Operating Permit #OP0513 by October 12, 2009. Therefore, PPL has been operating without a valid Title V Operating Permit at the Colstrip Power Plant since April 12, 2010."

A response letter was received from PPLM on October 24, 2012, acknowledging the late renewal application and also indicating that Units 1-4 have remained in compliance with the opacity limitations 99.9% of the time since January 1, 2008.

DEQ filed a lawsuit, Case No. 12-1546, against PPLM in Yellowstone County District Court on November 21, 2012, to follow up on the allegations in the violation letter. The lawsuit claims that PPLM operated its Colstrip facility without the required operating permit from April 12, 2010 through November 21, 2012, and that the Colstrip facility violated the opacity limits in its operating permit at least 141 times from January 1, 2008, through November 21, 2012. The lawsuit has been served on PPLM, and penalties and injunctive relief are being sought.

On November 15, 2012, the Department issued Warning Letter #RG12-53 citing a violation of ARM 17.8.749(1) and MAQP #0513-08, Section II.A.4 for Department observations of substantial fugitive coal dust.

On November 30, 2012, the Department received a letter from PPLM that indicated PPLM is in the process of updating its Dust Control Plan and addressing the substantial fugitive coal dust concerns described within the November 15, 2012 letter from the Department. A revised Dust Control Abatement Plan was received by the Department on December 11, 2012.

On January 29, 2013, the Department issued Warning Letter #WLRG13-01 citing a violation of ARM 17.8.110(2) and the subsequent air quality permit condition within Operating Permit #OP0513-08 (Section III.V.E, Prompt Deviation Reporting). The Department referenced three instances in which initial malfunction notifications were not submitted in accordance with the rule. The Department also cited a violation of ARM 17.8.110(5) and the subsequent air quality permit condition in Operating Permit #OP0513-08 (Section III.V.E, Prompt Deviation Reporting). The Department referenced 12 instances in which malfunction reports were not submitted in accordance with the rule.

On February 13, 2013, the Department received a letter from PPLM in response to Warning Letter #WLRG13-01. PPLM indicated that changes to its procedure and reviews conducted with responsible personnel will greatly help ensure its ability to meet notification requirements.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

PPLM operates Units 1, 2, 3, & 4 tangential coal-fired boilers and associated equipment for the generation of electricity.

B. Emission Units and Pollution Control Device Identification

Emission Units ID	Description	Pollution Control Device/Practice
EU001	Unit #1 – Tangential Coal Fired Boiler	Wet Venturi Scrubber
EU002	Unit #2 – Tangential Coal Fired Boiler	Wet Venturi Scrubber
EU003	Unit #3 – Tangential Coal Fired Boiler	Wet Venturi Scrubber, advanced low NOx firing and digital controls for NOx control
EU004	Unit #4 – Tangential Coal Fired Boiler	Wet Venturi Scrubber, advanced low NOx firing and digital controls for NOx control
EU005	Auxiliary Propane Boiler (1 & 2)	None
EU006	Building Heating Boiler (3 & 4)	None
EU007	Coal Handling System (1 & 2)	Enclosed conveyors Dust suppressant Enclosed downspout with elevation doors Dustless transfer chutes (certain locations)
EU008	Coal Handling System – (silos, distribution bin, surge pile tunnel, crushing and sampling house, and vacuum cleaning system) (3 & 4)	Enclosed conveyors Dust suppressant Enclosed downspout with elevation doors Dustless transfer chutes (certain locations)
EU009	Coal Piles (Wind Erosion)	Sealant on some storage piles, Dust suppression system, Enclosures, Wind fence (one coal pile), Water application through sprays or water trucks
EU010	Emergency Diesel Generators	None
EU012	Lime Handling System	Pneumatic Unloading
EU013	Plant Roads	Dust suppressant is applied annually and water is applied as needed
EU014	Process Ponds	Material is wet
EU015	Underground Gasoline Tank	None
EU017	Tangential Coal Fired Units 1-4 Mercury Emissions	Mercury oxidizer/sorbent
EU018	Mercury Oxidizer/Sorbent Handling Systems (Units 1-4)	Bin Vent Filter

C. Categorically Insignificant Sources/Activities

The following tables list the emission units included as insignificant in PPLM's operating permit.

Emissions Unit ID	Description
IEU01	Hydrazine Bulk Storage Tank Vent
IEU02	LPG Vaporizer
IEU03	Unit #1 Cooling Tower
IEU04	Unit #2 Cooling tower
IEU05	Unit #3 Cooling Tower
IEU06	Unit #4 Cooling Tower
IEU07	Waste Site
IEU08	Boiler Chemical Cleaning Process
IEU09	LPG System Safety Valves and Vents
IEU10	Process Tank Vents
IEU11	Process Ponds
IEU12	Boiler Chemical Cleaning Process
IEU13	Diesel Tanks
IEU14	Scrubber Relining Process

Cooling Towers #3 and #4 were included in the original operating permit application as insignificant emission units. The Department questioned this determination and requested information from MPC (currently PPLM). The facility submitted additional information on December 16, 1996, in response to a request for information on the operating permit application for Units 1 & 2, which included a statement that Units 1 & 2 do not use any chromium-based compounds in the cooling towers. This also holds true for Units 3 & 4. Since the cooling towers are not major sources or integral part of a major source as defined in Section 112(a)(1) of the Federal Clean Air Act, and chromium-based water treatments are not used, the Department agreed that the cooling towers are not subject to 40 CFR Part 63, Subpart Q. Therefore, IEU04, IEU05, IEU06, and IEU07 are considered insignificant emission units.

The Building Heating Boiler emissions unit was identified in the original application as insignificant, but has been determined to be a significant emissions unit. It has been determined to be significant because, if PPLM operates the Building Heating Boiler under the alternative operating scenario, there are specific applicable requirements. When PPLM is not operating the Building Heating Boiler, there are no emissions and the emissions unit is in compliance with all applicable requirements. PPLM is required to perform the necessary monitoring, recordkeeping, and reporting for all applicable requirements.

Two small propane fueled emergency backup generators were added to the insignificant unit list in Operating Permit #OP0513-02. The scrubber relining process was removed as an emitting unit and moved to the insignificant unit list in Operating Permit #OP0513-04.

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Tangential Coal Fired Boilers 1&2 (EU001 and EU002)

Units 1 & 2 (EU001 and EU002) are subject to 40 CFR Part 60, Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction Commenced After August 17, 1971. Under this provision, EU001 and EU002 have a PM limit of 0.10 lb/MMBtu, a SO_2 limit of 1.2 lb/MMBtu heat input and a NO_x limit of 0.7 lb/MMBtu heat input.

The Department determined 40 CFR Part 60, Subpart D requirements for the monitors to be less stringent than the requirements of the Acid Rain Provisions contained in 40 CFR Part 75. The basis of this position is that the monitors required by 40 CFR Part 60, Subpart D are used to indicate compliance. The monitoring requirements of this Operating Permit are to be used to determine compliance. The following sections of 40 CFR Part 60 are not included in the Operating Permit as applicable requirements: 40 CFR 60.45(c) and 40 CFR 60.13(a) through (g) and (i) through (j). These requirements are replaced with the requirements contained in 40 CFR Part 75 and PPLM is required to demonstrate compliance using the 40 CFR Part 75 CEMS for SO_2, NO_x, and opacity.

Units 1 & 2 are subject to 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation Plants. The facility shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements in Subpart Y. Subpart Y affected sources include the truck dump station, the lime silo bin vent, and any other affected source constructed or modified after October 24, 1974.

The Phase II permit requirements for SO_2 have been included in this Operating Permit.

NO_x History

MPC (currently PPLM) submitted a Phase I Permit Application, NO_x Compliance Plan to EPA Region VIII in August 1996. The application was submitted in accordance with the requirements of 40 CFR 76.9 for an early election unit with a deadline of submittal of January 1, 1997. Units 1 & 2 are Group 1, Phase II boilers. MPC (currently PPLM) was required to comply with the emission limit of 0.45 lb/MMBtu of heat input on an annual average basis for tangentially fired boilers (40 CFR 76.5) beginning with January 1, 1997, emissions and ending with December 31, 2007.

In accordance with 40 CFR 76.8(d)(1)(ii), EPA was responsible for issuing the early NO_x reduction permit. The state has not been delegated this authority. Under 40 CFR 72.73(b)(2), the Department was required to include, not later than January 1, 1999, the acid rain permit requirements for nitrogen oxides. PPLM, under 40 CFR 76.9(b), submitted a Phase II NO_x permit application by January 1, 1998.

On January 1, 2008, the early election plan expired and PPLM became subject to the NO_x limitations for Group I, Phase II boilers under 40 CFR 76.7.

Tangential Coal Fired Boilers 3 & 4 (EU003 and EU004)

In the original permit application, PPLM identified the exhaust gas temperature, (190ºF) and the limit of 1.225 lb/MMBtu on SO_2 emissions as applicable requirements for EU003 and EU004. The minimum exhaust gas temperature and this SO_2 limit were not identified in any air quality permits issued by the Department or by the EPA for EU003 or EU004. These requirements come from the certificate issued as part of the Major Facility Siting Act (MFSA). The Department does not consider these requirements as applicable requirements for operating permit purposes. The MFSA certificate required the Department to issue an MAQP. Based on this, the Department's position is that all the applicable requirements for operating permit purposes are contained in the MAQP.

PPLM's EU003 and EU004 are subject to 40 CFR 60.40 (Subpart D) since construction of the units began after 1971 and before September 18, 1978.

The Department determined Subpart D requirements for the monitors to be less stringent than the requirements of the Acid Rain Provisions contained in 40 CFR Part 75. The basis of this position is that the monitors required by 40 CFR Part 60, Subpart D are used to indicate compliance. The monitoring requirements of this Operating Permit are to be used to determine compliance. The following sections of 40 CFR Part 60 are not included in the Operating Permit as applicable requirements: 40 CFR 60.45(c) and 40 CFR 60.13(a) through (g) and (i) through (j). These requirements are replaced with the requirements contained in 40 CFR Part 75 and PPLM is required to demonstrate compliance using the Part 75 CEMS for SO_2, NO_x, and opacity.

The Department has determined the monitoring requirements contained in Appendix III of the EPA PSD permit issued September 11, 1979, and Sections II.C.1.e., II.C.2., II.E.1., and II.E.2. in MAQP #1187-03 issued October 13, 1996, are duplicate requirements. The Department has determined compliance with 40 CFR Part 75 will be compliance with these requirements for the SO_2, NO_X, and opacity monitors.

The Phase II permit requirements for SO_2 have been included in this Operating Permit.

<u>NO_x History</u>

MPC (currently PPLM) submitted a Phase I Permit Application, NO_x Compliance Plan to EPA Region VIII in August 1996. The application was submitted in accordance with the requirements of 40 CFR 76.9 for an early election unit with a deadline of submittal of January 1, 1997. Units 3 & 4 are Group 1, Phase II boilers. MPC (currently PPLM) was required to comply with the emission limit of 0.45 lb/MMBtu of heat input on an annual average basis for tangentially fired boilers (40 CFR 76.5) beginning with January 1, 1997, emissions and ending with December 31, 2007.

In accordance with 40 CFR 76.8(d)(1)(ii), EPA was responsible for issuing the early NO_x reduction permit. The state has not been delegated this authority. Under 40 CFR 72.73(b)(2), the Department was required to include, not later than January 1, 1999, the acid rain permit requirements for nitrogen oxides. MPC (currently PPLM), under 40 CFR 76.9(b), submitted a Phase II NO_X permit application by January 1, 1998.

On January 1, 2008, the early election plan expired and PPLM became subject to the NO_x limitations for Group I, Phase II boilers under 40 CFR 76.7.

Auxiliary Propane Boiler (EU05)

PPLM is required to notify the Department of both start up and shut down of the auxiliary propane heater. At the time of draft issuance of #OP0513-09, this unit would be subject to provisions of 40 CFR Part 63, Subpart DDDDD (see Section V.A for more information regarding this regulation).

Building Heater Boiler (EU06)

PPLM is required to notify the Department of both start up and shut down of the building heater boiler. At the time of draft issuance of #OP0513-09, this unit would be subject to provisions of 40 CFR Part 63, Subpart DDDDD (see Section V.A for more information regarding this regulation).

No other emission units at the facility contain source specific emissions limits or conditions.

Emergency Diesel Generators (EU10)

This emitting unit is subject to provisions of 40 CFR Part 63, Subpart ZZZZ.

Tangential Coal Fired Units 1-4 Mercury Emissions

New mercury control requirements implemented under the preconstruction permitting program have required that PPLM obtain an MAQP to include mercury provisions under the Administrative Rules of Montana (ARM) 17.8.771 for the Colstrip Plant. On April 9, 2009, the Department issued MAQP #0513-07 with the following mercury limits and operating requirements, which are also reflected in Section III.L of Operating Permit #OP0513-05:

- Beginning January 1, 2010, facility-wide emissions of mercury (Hg) shall not exceed 0.9 pounds per trillion British thermal units (lb/TBtu), calculated as a rolling 12-month average (ARM 17.8.771).

- On each Unit 1-4, PPLM shall install a mercury control system that oxidizes and sorbs emissions of mercury. PPLM shall implement the operation and maintenance of mercury control systems on or before January 1, 2010 (ARM 17.8.771).

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in Operating Permits. In addition, when the applicable requirement does not require periodic testing or monitoring, a permit must require periodic monitoring that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance do not require the permit to impose the same level of rigor for all emission units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo **(i.e., no monitoring**) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

This permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by PPLM to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

Units 1-4 are required to maintain CEMS for SO_2, NO_x, CO_2, and opacity. In addition, the Department determined continuous monitoring is also required for stack gas temperature, stack gas moisture (where necessary), megawatt production, and Btu per hour (as a function of heat rate and megawatt production). Units 1-4 are also required to maintain Mercury Emissions Monitoring Systems (MEMS) for mercury as of January 1, 2010.

The Department determined that fugitive emission units located at the facility require weekly visual inspections. The method of demonstrating compliance includes a requirement to observe specific sites and to log the information. The log will be kept at the plant site and be available for review during inspections. The compliance demonstration requires verification that visual inspections were performed and they were recorded and a log maintained.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep, as a permanent business record, for at least five years following the date of the generation of the record, each record listed in the operating permit. All source test recordkeeping shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit, and Section V of the Operating Permit "General Conditions" explains the reporting requirements. However, PPLM is required to semi-annual and annual monitoring reports to the Department, and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation. PPLM is also required to submit quarterly reports as required by Section III.B, III.C, and Appendices E, F, G, H, I, and J of Operating Permit #OP0513-09.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Billings Gazette* and *Forsyth Independent Press* newspapers on or before April 18, 2013. The Department provided a 30-day public comment period on the draft operating permit from April 18, 2013, to May 20, 2013. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The comments and issues received by May 20, 2013 will be summarized, along with the Department's responses, in the following table. All comments received during the public comment period will be promptly forwarded to PPLM so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response

Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response

SECTION IV. NON-APPLICABLE REQUIREMENTS

The Department reviewed the rules and regulations contained in Section 8 of the original application that PPLM identified as non-applicable. The Department included those rules and regulations that it agreed were non-applicable to Units 3 & 4 in the Operating Permit in Section IV along with the reasons for non-applicability.

The Department did not, however, include as non-applicable all of the rules or regulations identified by PPLM. Rules and regulations that address procedural requirements and those that do not establish emission limits or applicable requirements on the facility were not included.

40 CFR Part 60, Subpart Da is not applicable because construction of the facility began prior to September 18, 1978, except the CEMS for Units 3 & 4 were determined to be subject to this NSPS.

SECTION V. OTHER CONSIDERATIONS

A. MACT Standards (40 CFR Part 63)

PPLM's Colstrip facility is subject to the standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 63, Subpart DDDDD – *National Emissions Standards for Hazardous Air Pollutants for Major Industrial Sources: Industrial Commercial, and Institutional Boilers and Process Heaters (the "Boiler MACT")* because the facility includes an existing 197.5 MMBtu/hr auxiliary boiler for Units 1 & 2 and an existing 107.4 MMBtu/hr building heating boiler for Units 3 & 4. The current compliance date is March 21, 2014; however, EPA is working through efforts at reconsideration of the Boiler MACT at this time.

PPLM's Colstrip facility is subject to the standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* because the facility includes an existing 1340-brake horsepower (bhp) paste plant emergency generator for Units 1 & 2, an existing 1502-bhp paste plant emergency generator for Units 3 & 4, and an existing 40-bhp security building emergency generator.

On February 16, 2012, EPA finalized the Mercury Air Toxics Standard (MATS) rule, also known as the Utility MACT, which was promulgated under 40 CFR Part 63, Subpart UUUUU – *National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units*. PPLM's Colstrip facility is an affected source pursuant to this MACT standard, which has a compliance date of April 16, 2015. On November 30, 2012, EPA proposed updates to this rule (Docket # EPA-HQ-OAR-2009-0234, 77 FR 71323). The updates that affect PPLM Colstrip are the requirements applicable during periods of startup and shutdown for MATS. Because these proposed changes have not been finalized, the Department refers to the Work Practice Standards in Table 3 of 40 CFR Part 63, Subpart UUUUU in #OP0513-09 which is where the current version, and future final version, of the requirements applicable during periods of startup and shutdown for MATS are described.

B. NESHAP Standards (40 CFR Part 61)

As of the issuance of this permit, the Department is unaware of any proposed or pending NESHAP standards, in addition to those that are listed, that are applicable to this facility.

C. NSPS Standards

As of the issuance date of this permit, the Department is unaware of any future NSPS Standards that may be promulgated that will affect this facility.

D. Risk Management Plan

A Risk Management Plan as defined in 40 CFR Part 68 is required for Units 1 & 2 and Units 3 & 4. The facility must comply with 40 CFR Part 68 requirements no later than June 21, 1999; 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

E. Compliance Assurance Monitoring (CAM) Plan

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to ARM Title 17, chapter 8, subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (unless the limitation or standard is exempt under ARM 17.8.1503(2));
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than major source thresholds.

The PPLM Costrip facility meets the above criteria for particulate matter (PM). Refer to Appendix I of Operating Permit #OP0513-09 for a summary of the PM CAM plan.

F. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the "light duty vehicle rule" (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG "Tailoring Rule" (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either the construction of a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011, would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO_2e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities that hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision made on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for a modification that was determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, a source that is not considered a PSD major source based on criteria pollutant emissions would become subject to PSD review if its facility-wide potential emissions equaled or exceeded 100,000 TPY of CO_2 equivalent (CO_2e) and 100 or 250 TPY of GHG on a mass basis depending on its listed status in ARM 17.8.801(22) and it undertook a permitting action with increases of 75,000 TPY or more of CO_2e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, a source not currently holding a Title V permit that has potential facility-wide emissions equal to or exceeding 100,000 TPY of CO_2e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

PPLM is currently subject to PSD permitting in that this facility is a listed source and has a PTE of 100 TPY or more of pollutants subject to regulation under the Federal Clean Air Act. GHG must be analyzed along with all criteria pollutants for any permitting action to determine if that action is a major modification and subject to PSD permitting. The Department, upon receiving a de minimis request, modification, or other future permitting action, will request such information as needed to determine PPLM's GHG emissions. Any applicable GHG requirements, including those that develop as a result of a PSD permitting action, will be incorporated into the Title V permit.